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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,402	09/16/2003	Warren M. Farnworth	2269-5595US (01-0088.00/U)	2929
24247	7590	06/01/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			CHEN, VIVIAN	
			ART UNIT	PAPER NUMBER
			1773	
DATE MAILED: 06/01/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/663,402

Applicant(s)

FARNWORTH ET AL.

Examiner

Vivian Chen

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/15/2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-45, 69-82 and 92-111 is/are pending in the application.  
4a) Of the above claim(s) 28, 38, 39, 75, 81 and 82 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 21-27, 29-37, 40-45, 69-74, 76-80 and 92-111 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/17/03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

1. Claims 1-20, 46-68, 83-91 have been cancelled by Applicant.

### ***Specification***

2. The amendments filed 9/15/2005 and 3/15/2006 are objected to under 35 U.S.C. 132(a) because they introduce new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the newly added recitation of “programmed material consolidation”.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 112***

3. Claims 21-27, 29-37, 40-45, 69-74, 76-80, 92-111 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification only provides support for the recitation of stereolithographic fabrication, not other methods of programmed material consolidation (e.g., fused deposition modeling, selective laser sintering, polyjet, thermal or photopolymer phase change inkjet processes, etc.).

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4. Claims 26-27, 37, 43, 45, 73-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 26-27, 37, 73-74, the phrase “substantially planar” is vague and indefinite because it is unclear what constitutes “substantially” planar.

In claim 43 the phrase “substantially cured” is vague and indefinite because it is unclear what constitutes “substantially” cured.

In claim 45, the phrase “substantially the same degree of finishing” is vague and indefinite because it is unclear what constitutes “substantially” the same degree.

***Claim Rejections - 35 USC § 103***

5. Claims 69, 71, 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over CRUMP (US 5,121,329).

CRUMP discloses a release article for stereolithographically fabricated objects, wherein the planar article comprises a surface securing the article to the platen and a surface contacting the fabricated object and facilitating release of said object and article from the platen. (line 1-25, col. 9)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use conventional adhering methods such as an adherent material to secure a planar release sheet to a platen in order to facilitate clean removal of fabricated objects.

***Response to Amendment***

6. The rejections of claims 21-22, 24, 26-27, 35-37, 40-42, 45, 73-74 under 35 U.S.C. 103(a) have been withdrawn in view of Applicant's amendments filed 3/15/2006. However, upon resolution of outstanding new matter issues, the rejections maybe reinstated.

***Response to Arguments***

7. Applicant's arguments filed 3/15/2006 have been fully considered but they are not persuasive.

(A) Applicant argues that the specification as originally filed provides support for the term "programmed material consolidation". However, while the specification provides support for a particular sub-type of programmed material consolidation (i.e., stereolithography), it does not provide support for the considerably broader term "programmed material consolidation" which encompasses virtually any of numerous additive-type rapid prototyping methods which utilizes programming to form an object (e.g., fused deposition modeling, selective laser sintering, polyjet, thermal or photopolymer phase change inkjet processes, etc.) -- many of which have requirements and considerations which are not addressed and therefore are ***not*** deemed enabled by the specification as originally filed For illustrative examples, see the attached exhibits ("RAPID PROTOTYPING STEREOLITHOGRAPHY, SELECTIVE LASER SINTERING, AND POLYJET...." (Abstract); Wikipedia article on RAPID PROTOTYPING; HIATT ET AL (US 2004/0148353), paragraph 0016) which disclose various additive-type rapid prototyping technologies which would fall under the broad designation of "programmed material consolidation" but are recognized in the art as being distinct technologies from

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stereolithography. Therefore, the disclosure of only stereolithography in the specification as originally filed does not provide adequate support for the substantially broader recitation of “programmed material consolidation”.

(B) Applicant argues that the terms “substantially planar” and “substantially cured” and “substantially the same degree of finishing” are not vague and indefinite because the specification as originally filed clearly establishes the meaning of those terms. However, with respect to “substantially planar”, the specification only discloses what constitutes a planar surface, but does not clearly establish what constitutes a “substantially” planar surface, since how much deviation from a planar surface is dependent on various situations. Similarly, with respect to “substantially cured” in claim 43, the specification does not clearly provide criteria (e.g., the presence or absence of tackiness, etc.) for determining what constitutes “substantially” cured. With respect with “substantially the same degree of finishing” in claim 45, the specification merely indicates that the resultant surface (after the removal of the releasable article) requires little or no additional finishing -- it does not provide any criteria for the degree of finishing required in comparison with other surfaces,

(C) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the presence of a planar surface on a fabricated object after removal of the releasable article or layer) are not recited in the rejected claim(s) 69, 71, 76. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 26, 2006



Vivian Chen  
Primary Examiner  
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